REMARKS

These remarks are filed in response to the Office action dated May 27, 2004.

All objections and rejections are respectfully traversed.

Continued examination of the application is respectfully requested.

Claims 1-43 are in the case.

Claims 30-43 were added to better claim the invention.

On page 2 of the Office action, claims 1, 2, 6, 12, 13, 16-20 and 23 were rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 6,628,661 to Goldman et al., hereinafter "Goldman," in view of U.S. Patent No. 6,578,086 to Regan et al., hereinafter "Regan."

Description of Cited References

Goldman teaches a technique for managing spanning trees in a data network. According to the technique, a network core in the data network is identified. The network core may encompass a number of switches in a high bandwidth portion of the data network. Distances of switches in the network from the network core are determined and a spanning tree is generated and/or recovered based on the switches' distance from the network core. See Col. 3, lines 17-28 and Col. 5, lines 48-50.

Specifically, a "heartbeat" protocol running on a switch distributes heartbeat frames containing an identity of the switch and a priority, which is a value that represents the switch's distance from the core network (distance-to-core). See Col. 6, 38-47, Fig. 4.

The priority influences the selection of a root bridge for the spanning tree, such that a switch in the core network has a greater chance at being selected a root bridge than a switch outside the core network. After a root bridge is selected, the spanning tree is built extending from the selected root in a conventional manner. See Col. 6, line 38 to Col. 7, line 9.

To recover from a communication port failure, a switch determines if it has any ports available for reconfiguration. If so, the switch then, using heartbeat frame information received from other switches, identifies an available port connected to an upstream switch (i.e., connected to a switch associated with a smaller distance-to-core value). The switch reconfigures the identified port to the forwarding state. See Col. 8, lines 13-47.

Regan describes a technique for dynamically managing a topology of a data network on a network device that incorporates a link state protocol database and an extended link state protocol. See Col. 2, line 66 to Col. 3 line 1 and Col. 4, line 60 to Col. 5 line 4. According to the technique, the network device contains a controller which works in conjunction with the link state protocol database and the extended link state protocol to dynamically manage an active topology of the data network. See Col. 5, lines 21-26. Specifically, the controller issues link state protocol data units (LSPDUs) which provides information (e.g., status) about ports and links associated of the network device containing the controller. See Col. 7, line 29 to Col. 8, line 24 and Col. 10, lines 20-43. In addition, the controller processes acquired link state protocol data units (LSPDUs) including creating and updating entries in the link state protocol database with information con-

tained in the LSPDUs. See Col. 8, lines 245-37 and Col. 9, line 33 to Col. 10, line 19. From the information contained in the LSPDUs, the network device may derive the network's topology.

Differences Between Cited References and the Present Invention

Representative claim 1 recites:

> 1. In an intermediate network device having a plurality of ports for forwarding messages in a computer network and two or more supervisors, each supervisor including at least one spanning tree protocol (STP) engine configured to transition the ports of the device among a plurality of spanning tree port states, a method for continuing operation of a spanning tree protocol despite crashes or failures, the method comprising the steps of:
>
> ***designating a first supervisor to be an active supervisor and a second supervisor to be a standby supervisor for the network device;***
>
> running the spanning tree protocol at the active supervisor such that the STP engine at the active supervisor elects at least one root of the computer network and directs the ports to transition among the spanning tree port states;
>
> storing the spanning tree port states of the ports at the standby supervisor;
>
> in response to a failure at the active supervisor, running the spanning tree protocol at the standby supervisor; and
>
> utilizing the stored spanning tree port states of the ports at the standby supervisor to run the spanning tree protocol at the standby supervisor.

Applicants respectfully submit that neither Goldman nor Regan either individually or in combination teach or suggest Applicants' claimed "***designating a first supervisor to be an active supervisor and a second supervisor to be a standby supervisor for the network device***."

Examiner seems to equate Regan's controller to Applicants' claimed active and standby supervisors, however, Applicants respectfully urge that this equivalence is improper. At best, Regan's controller is a single entity that maintains an active topology of the data network using information contained in LSPDUs. Nowhere does Regan suggest that the controller is a second supervisor that is designated a standby supervisor. In addition, Goldman seems to be concerned with choosing a root node, ideally in a core portion of the network, and building a spanning tree from the chosen root node in order to take advantage of higher speed bandwidth resources in that portion of the data network. Regan, on the other hand, seems to be concerned with maintaining a network topology at a network device, *inter alia*, to facilitate faster convergence times. Nowhere does either reference suggest or teach that employing active and standby supervisors would achieve these goals and therefore would not have cause to teach Applicants' claimed "***designating a first supervisor to be an active supervisor and a second supervisor to be a standby supervisor for the network device***."

Because of the absence of Applicants' claimed "***designating a first supervisor to be an active supervisor and a second supervisor to be a standby supervisor for the network device***" in Goldman and Regan, Applicants believe that Goldman and Regan are legally precluded from rendering Applicants' claimed invention obvious under 35 U.S.C. §103.

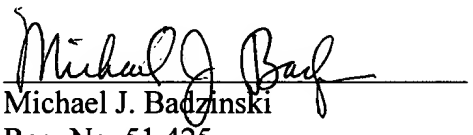
All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent on believed to be allowable dependent claims and therefore believed to be in condition for allowance.

Quick favorable action is respectfully requested.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,



Michael J. Badzinski
Reg. No. 51,425
CESARI AND MCKENNA, LLP
88 Black Falcon Avenue
Boston, MA 02210-2414
(617) 951-2500